



Ion Chromatography columns e accessories



Your Specialists in Chromatography

Company Profile

SepaChrom is the brainchild of the founders to create a dedicated reality, unique and able to support the **Chromatography users** optimizing their challenges.

Our Core competence is the manufacturing and trading of **High-Quality** products for **Chromatography**.

SepaChrom product portfolio includes a wide range of in-house manufactured **HPLC** Columns in both **Analytical** and **Preparative** scale, **Flash** cartridges & Instruments, and **Process** scale purification.

Our offer of products for Chromatography includes consumables and accessories, for both **HPLC** and **GC** techniques.

Our brands **Robusta®**, **Adamas®**, **Vydamas®**, **TMC®**, **Purezza®**, **Sepa-Bulk®** are only few of the product lines we propose to the **Chromatographers**.

Our Mission

Decades of experience of our team, combined with a range of High Quality selected products and the most efficient technological solutions, allows **SepaChrom** to be a reference to :

- **Pharma,**
- **Biotech,**
- **Chemical,**
- **Food and Beverage,**
- **Cosmetic,**
- **Environmental,**
- **Clinical**
- **Petrochemical**

industries, at **R&D** department as well **QC** laboratories and **Production**.

Our commitment is to provide the Highest Technical Support that Chromatographers expect from

Your Specialists in Chromatography



Customers in Mind

The success of **SepaChrom** depends by the complete **satisfaction** of our customers, and consequently by their success.

SepaChrom expertise result in a High-Quality support **pre & after** sales to the Chromatographic Users.

A world-wide Distributor Network will assure the users the best in class technical and commercial support to properly approach their Chromatography challenges.

This include a **fast delivery** of your products from our warehouse to everywhere.



Ion Chromatography

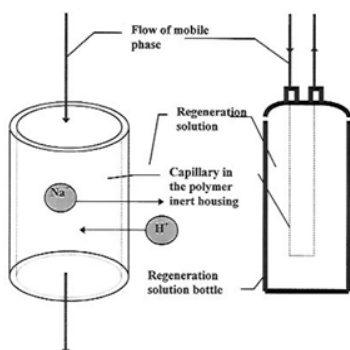
IC Suppressor Mod. SP2018-1

- **Easy to use**
- **Robust**
- **Affordable**

MADE IN ITALY

Ion Chromatography Suppressor Mod. SP2018-1 is designed to decrease the mobile phase conductivity before detector.

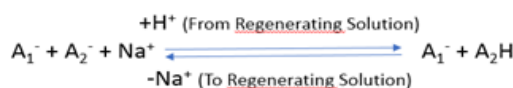
This unit can substitute suppressor column and can be used together with any IC system for detection of anions in water solutions. The Mod. SP2018-1 is designed for operating mainly with the hydroxide, and carbonate eluents.



Description

Traditional suppressed-based IC method with use of suppression columns is based on the need to decrease eluent conductivity before the detector. The main drawback of using suppression columns is the demand to regenerate them approximately every 6-8 hours of work. This fact initiates the development of other systems to offset mobile phase conductivity. The principle of Mod. SP2018-1 consists in permanent removing cations (mainly Na+) from mobile phase flow through the capillary wall into the regeneration solution.

This process is shown on the following scheme:



- A1- : Anion to be analyzed
 A2- : Eluent Anion
 Na+ : Eluent Cation
 A2H : Weak Acid at Mod. SP2018-1 outlet

The process is identical to the ones on the suppression column, but the ion exchange process proceeded through the capillary wall- The wall of this capillary is an ion-exchange membrane (see pic. 1).

Ordering Information		
Description	Pkg	Stock N#
SepaChrom IC Suppressor mod. SP2018-1	Ea	SX0001

IC Sep AN-1 Column

IC Sep AN-1 is an anion exchange column based on Poly(styrene-divinylbenzene) alkyl dimethylethanol ammonium functional group packing compatible with both suppressor-bases and single column ion chromatography systems.

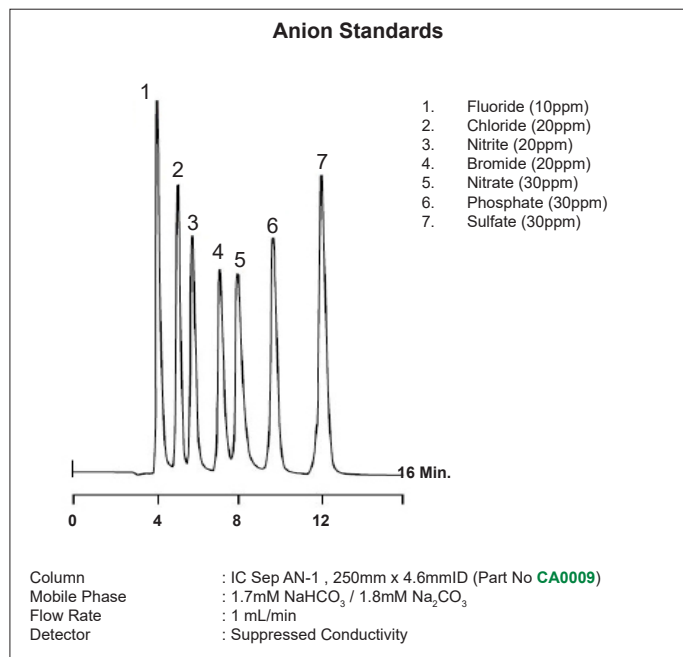
- **9µm Particle Size**
- **0.05meq/g Exchange Capacity**
- **pH 2-13, No organic solvents**
- **Metal-Free Hardware (PEEK)**

A variety of mobile phase including sodium carbonate/bicarbonate, sodium hydroxide, and borate/gluconate may be used. Sodium carbonate/bicarbonate mobile phase combined with suppressed conductivity detection allows the separation and detection of fluoride, chloride, nitrite, bromide, nitrate, phosphate and sulfate.

IC Sep AN-1 column may also be used for separation of sulfite and sulfate or selenite and selenate. The unique properties of the IC Sep AN-1 resin provide a nice separation of fluoride from the water dip for a more reliable determination of fluoride.

The macroporous polymeric packing is poly(styrene-divinylbenzene) based with alkyl dimethylethanol ammonium functionalities. This material is rugged, and the column bed is stable and exhibits long life. The columns are packed in metal-free hardware that withstands pressure up to 5000psig.

The IC Sep AN-1 columns may be protected by contaminants in order to prolong the column lifetime using the Guard Cartridges Part No CA0010 together with the proper Guard Cartridges Holder.



Ordering Information		
Description	Pkg	Stock N#
IC Sep AN-1 - 250 x 4.6mmID PEEK Column	Ea	CA0009
Guard Cartridges for IC Sep AN-1 Column	3/pkg	CA0010
Guard Cartridge Holder	Ea	CA0035
7 Anion Standards Mix - 100mL - Certified	100mL	ZA0004

*: all trademarks mentioned in this document are registered.

Ion Chromatography

IC Sep AN-300B Column

The resins used for the chromatography of inorganic anions are composed of a macroporous co-polymer of polystyrene-divinylbenzene. Those substituted with alkyl or alkyl quaternary ammonia are used for the separation of anions using carbonate type eluants.

- Polymeric substrate.
- Compatibility with organic solvents.
- High efficiency.
- Reproducibility.
- pH stability from 0 to 14.

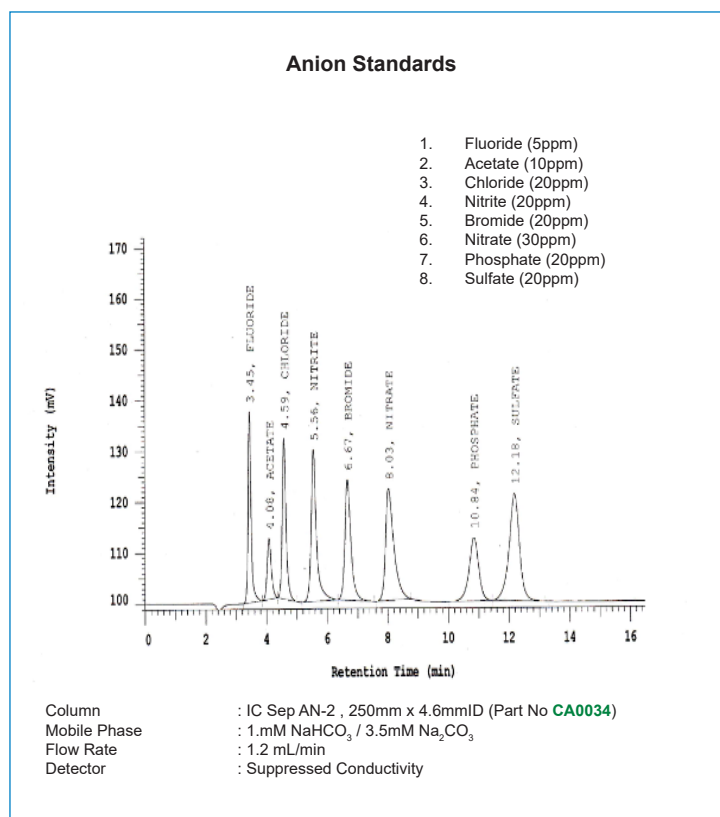
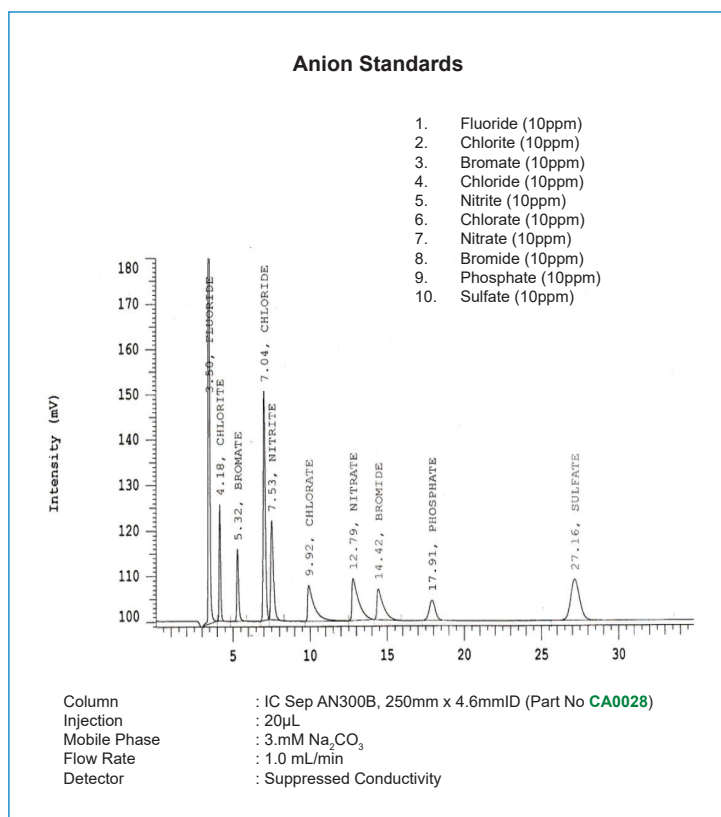
The IC Sep AN300B columns may be protected by contaminants in order to prolong the column lifetime using the Guard Cartridges type IC Sep AN-300B Part No CA0030 together with the proper Guard Cartridges Holder CA0035.

IC Sep AN-2 Column

IC Sep AN-2 is an High Selectivity column for the analysis of Anions and acetate. The resins used are composed of a macroporous co-polymer of polystyrene-divinylbenzene with alkyl or alkyl quaternary ammonia groups used for the separation of anions and acetate using carbonate type eluants.

- Polymeric substrate.
- Compatibility with organic solvents.
- High efficiency.
- Reproducibility.
- pH stability from 0 to 14.

The IC Sep AN-1 columns may be protected by contaminants in order to prolong the column lifetime using the Guard Cartridges type IC Sep AN-2 Part No CA0040 together with the proper Guard Cartridges Holder CA0035.

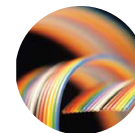


Ordering Information		
Description	Pkg	Stock N#
IC Sep AN-300B - 250 x 4.6mmID PEEK Column	Ea	CA0028
Guard Cartridges for IC Sep AN-300B Column	3/pkg	CA0030
Guard Cartridge Holder	Ea	CA0035
7 Anion Standards Mix - 100mL - Certified	100mL	ZA0004

Ordering Information		
Description	Pkg	Stock N#
IC Sep AN-2 - 250 x 4.6mmID PEEK Column	Ea	CA0034
Guard Cartridges for IC Sep AN-2 Column	3/pkg	CA0040
Guard Cartridge Holder	Ea	CA0035
7 Anion Standards Mix - 100mL - Certified	100mL	ZA0004

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Maxi-Clean™ - SPE Cartridges - Ion Chromatography

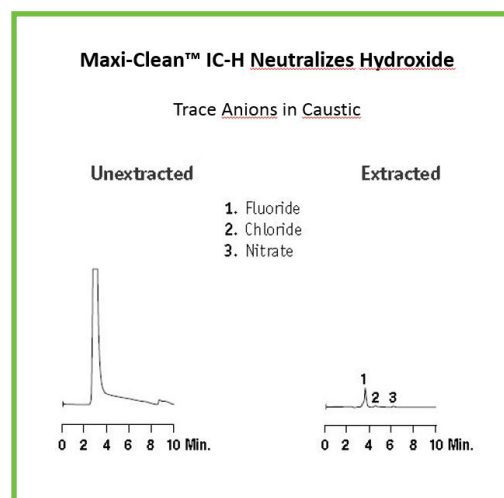


Ion Chromatography SPE Cartridges

- Eliminate Matrix Interferences before Ion Analysis
- 7 Chemistries to Solve a Variety of Specific Problems

Maxi-Clean™ Ion Chromatography Sorbent Specification							
Packing	Base	Counter Ion	Average Particle Size	Molecular Exclusion Limit	Exchange Capacity	Retains	Benefits
IC-OH	Styrene/DVB	Hydroxide	50µ	1000 Daltons	1.0 meq/mL	Anions	Exchanges Anions for Hydroxide. May be used to remove or concentrate Anions from sample and to increase pH of Acidic samples. Remove Cations that form insoluble hydroxide salts
IC-H	Styrene/DVB	Hydronium	50µ	1000 Daltons	2.0 meq/mL	Cations	Exchanges Cations for H ⁺ . May be used to remove or concentrate Cations from sample and to reduce pH of Basic samples.
IC-Ag	Styrene/DVB	Silver	50µ	1000 Daltons	2.0 meq/mL	Chloride Iodide Bromide	Removes excess Halides through formation of Ag-Halide salts
IC-Ba	Styrene/DVB	Barium	50µ	1000 Daltons	2.0 meq/mL	Sulfate	Removes excess Sulfate through formation of BaSO ₄ .
IC-Na	Styrene/DVB	Sodium	50µ	1000 Daltons	2.0 meq/mL	Cations	Exchanges Cations for Na ⁺ . May be used to remove or retain Cations from sample without changing the pH of the sample
IC-Chelate	Styrene/DVB	Sodium	50µ	1000 Daltons	0.4 meq/mL	Polyvalent Metal Ions	Exchanges Transition Metals and Divalent Cations for Na ⁺ . May be used to remove or retain Divalent Cations and Transition Metals from sample.
IC-RP	Polystyrene	-	550µ	-	-	Hydrophobic Components	Remove Surfactants, Organic Acids and other Organic Substances. Inorganic Ions pass through.

Maxi-Clean™ - Ion Chromatography Cartridges				
Packing	Bed Weight	Qty	Old Alltech #	Part.No
IC-OH	0.5mL	50	30262	LD0158
	1.5mL	25	30254	LD0153
IC-H	0.5mL	50	30264	LD0160
	1.5mL	25	30256	LD0154
IC-Ag	0.5mL	50	30266	LD0162
	1.5mL	25	30258	LD0155
IC-Ba	0.5mL	50	30268	LD0163
	1.5mL	25	30261	LD0157
IC-Na	0.5mL	50	30270	LD0164
	1.5mL	25	30263	LD0159
IC-Chelate	0.5mL	50	30250	LD0151
	1.5mL	25	30265	LD0161
IC-RP	0.5mL	50	30260	LD0156
	1.5mL	25	30252	LD0152



Ion Exchange SPE Cartridges

- To Remove or Concentrate Basic or Acid Compounds in your Sample
- SCX & SAX Styrene/Divinylbenzene Sorbents

Maxi-Clean™ - Ion Exchange Cartridges				
Packing	Bed Weight	Qty	Old Alltech #	Part.No
SCX	300mg	50	5178148	LD0314
	600mg	50	21902	LD0120
	600mg	100	21903	LD0121
SAX	600mg	50	21907	LD0122
	600mg	100	21908	LD0123
	900mg	25	5178135	LD0317

Maxi-Clean™ Ion Exchange Sorbent Specification							
Packing	Base	Counter Ion	Ave. Particle Size	Functional Group	Exchange Capacity	Retains	Benefits
SCX	Styrene/DVB	Hydrogen	50µ	Benzene Sulfonic Acid	2.0 meq/mL	Cations, (+) Charged Compounds	Remove/Concentrate Basic Compounds
SAX	Styrene/DVB	Acetate	50µ	Tetramethyl Ammonium	1.0 meq/mL	Anions, (-) Charged Compounds	Remove/Concentrate Acidic Compounds

Other products available from SepaChrom

HPLC

HPLC Silica Based Columns for Routine Analysis
HPLC & UHPLC Silica Based Columns for Small Molecules Separation
HPLC Silica Based Columns for Large Molecules Separation
HPLC Silica Based Columns for Traditional Chinese Medicine
Polymer Base Columns for Carbohydrate & Organic Acids Analysis Chiral HPLC Columns
Ion Chromatography Columns for Anions and Cations Analysis

ROBUSTA®

Adamas®

MEDIA

Irregular & Spherical Silica Gel for Flash, Preparative & Industrial Purification
Raw & Bonded Silica Gel for Any Application
Wide Range Porosity (30Å- 2500Å) and Particle Size (10µ-200µ)
Polymer Based Resin for Reversed Phase and Ion Exchange Chromatography

PREP

10mm - 50mmID Packed Preparative Columns for Lab Scale Purification packed by SepaChrom
50mm - 2000mmID Process Scale Chromatography Columns & Systems, Flanged & DAC Technology
OEM Packed Preparative Columns
Scale-up Method Development & Custom Packing Service

ROBUSTA®

Adamas®

FLASH

Instruments for Flash and Prep Chromatography up to 825mL/min & 400 bar pressure
Integrated ELSD & MS Simple Quad Detector for Flash Purification
TLC Plates and Accessories for Flash Chromatography
A Complete Range of Flash Columns for All Existing Flash Instruments

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Advion Interchim

SPE

SEClute™, Extract-Clean™, Maxi-Clean™ SPE Cartridges for Pharma, Environmental, Food&Beverage Applications.
PuroPhase™ Polymer Base SPE Cartridges for Clinical & Forensic Applications.
Maxi-Clean™ Ion Chromatography SPE Cartridges
Vydac® - Bioselect SPE Cartridges for Biological Samples
Accessories for SPE & Syringe Filters

OTHER INSTRUMENTS

SepaChrom Hydrogen, Nitrogen and Air Generators for GC
SepaChrom Nitrogen Generators for LC-MS
Automated Sample Evaporators for Lab Scale Purification
Interchim Advion CMS Compact Mass Spectrometer Detector

CONSUMABLE

Autosampler Vials for HPLC, IC e GC
Head Space and Sampling Vials
SS & PEEK Tubing, Fittings, Ferrule & Valves
Syringes and Septa for GC
Traps for GC Gas Lines

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